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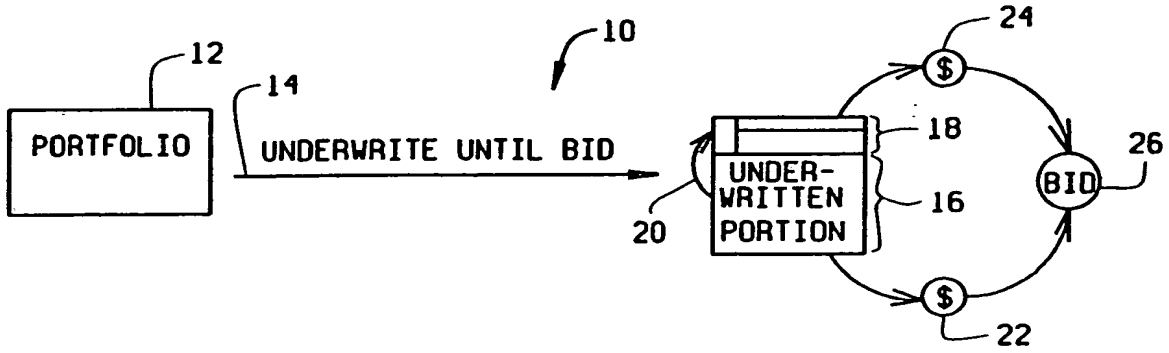
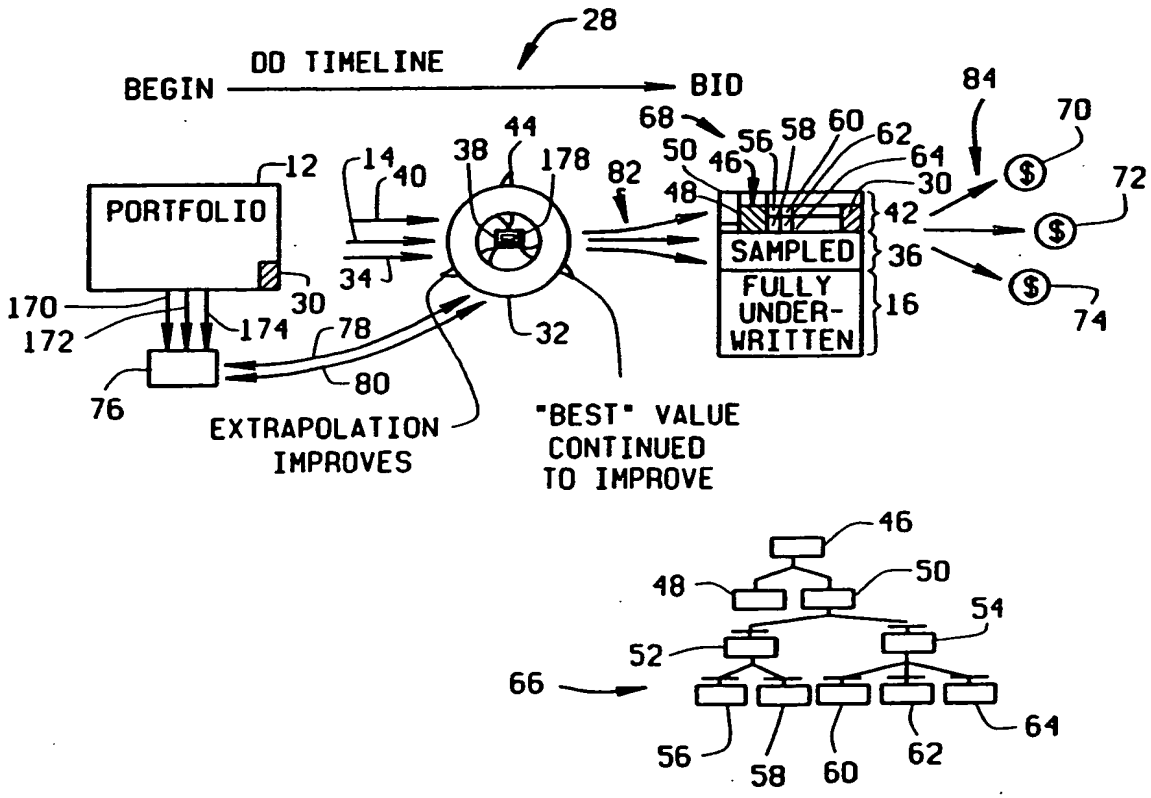


FIG. 1
PRIOR ART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"BEST" VALUE CONTINUED TO IMPROVE

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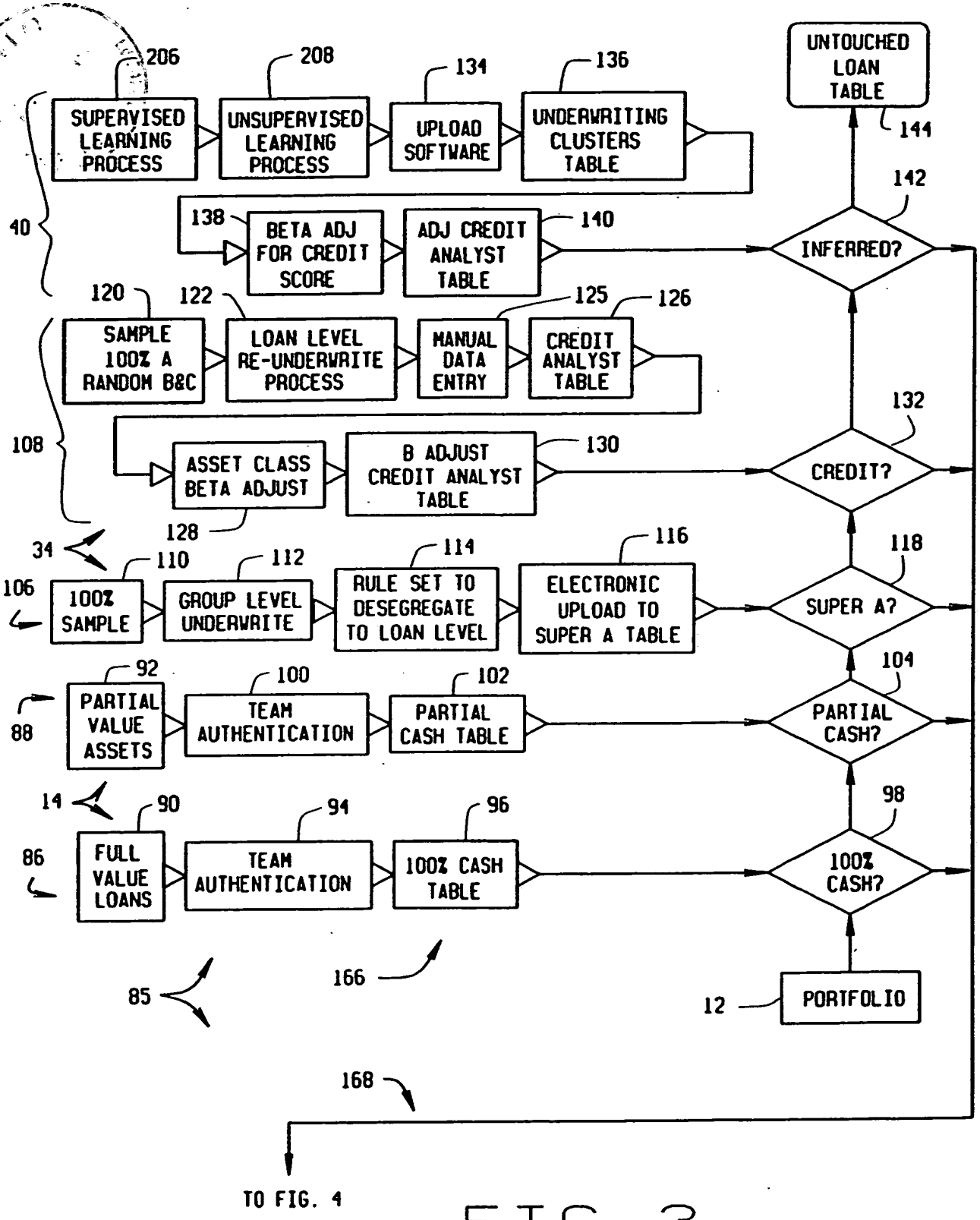
FIG. 2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PARTIAL CASH TABLE
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TEAM AUTHENTICATION
100% CASH TABLE
100% CASH?
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TO FIG. 4

FIG. 3

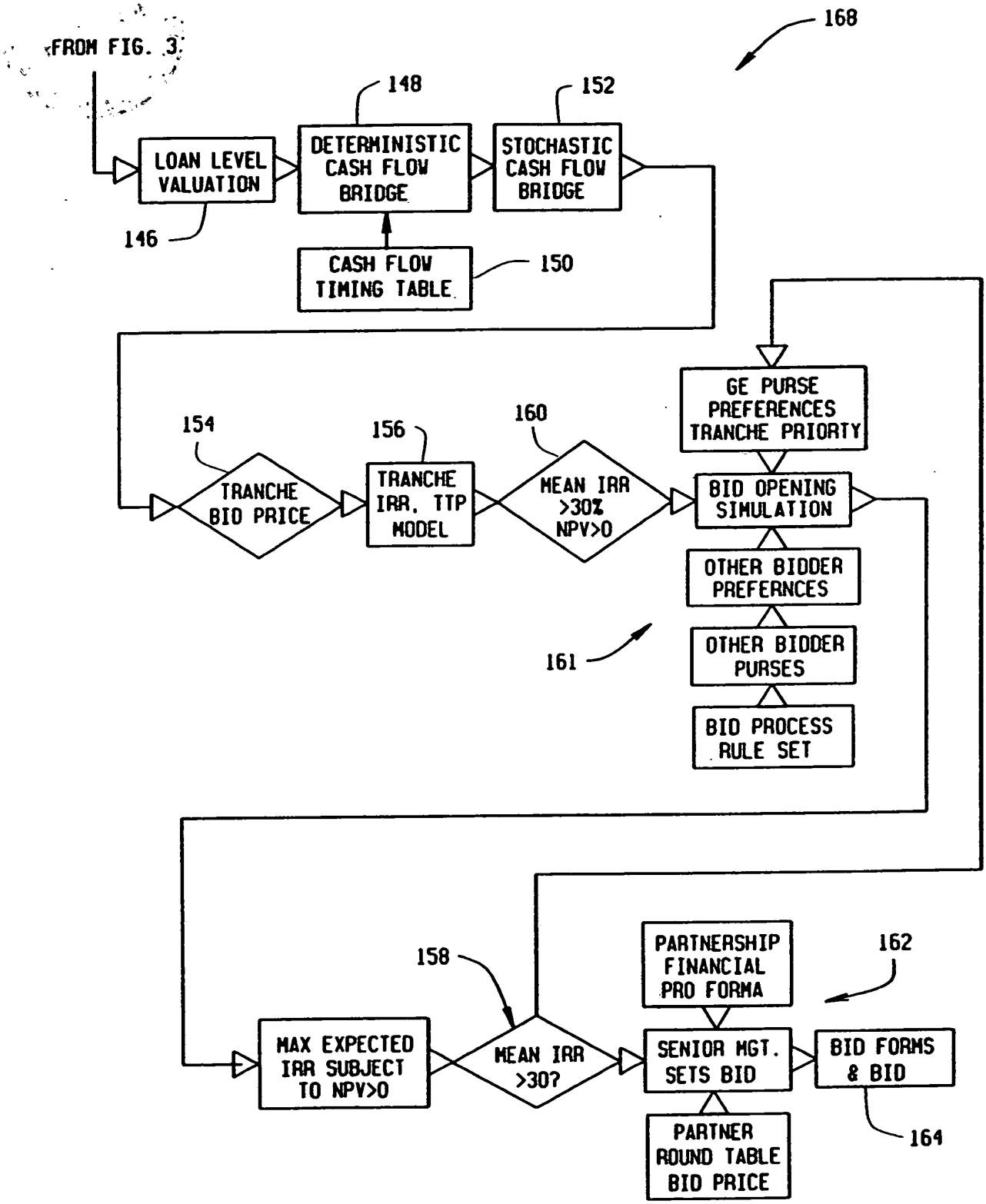
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FIG. 4

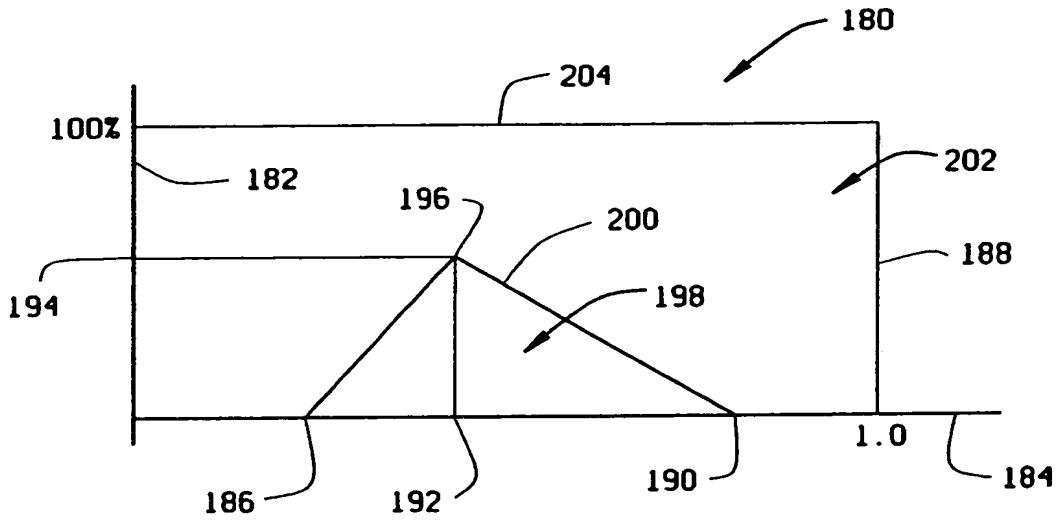

FIG. 5

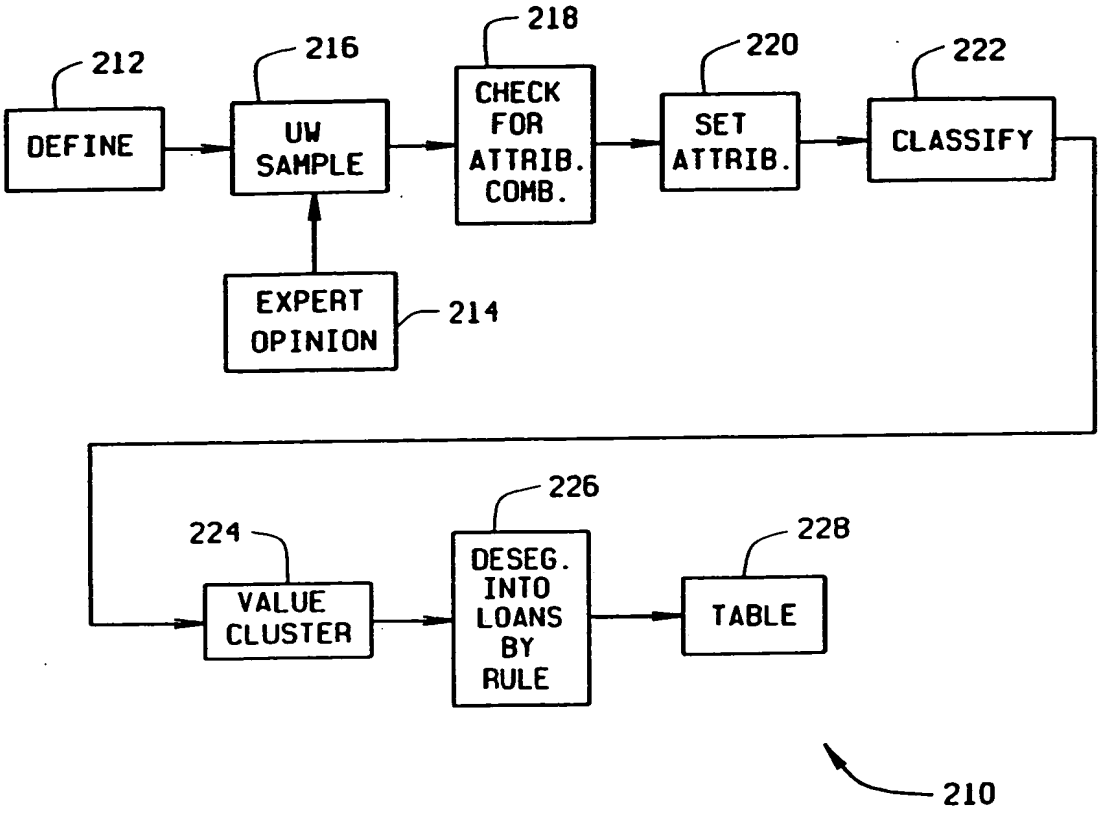
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FIG. 6

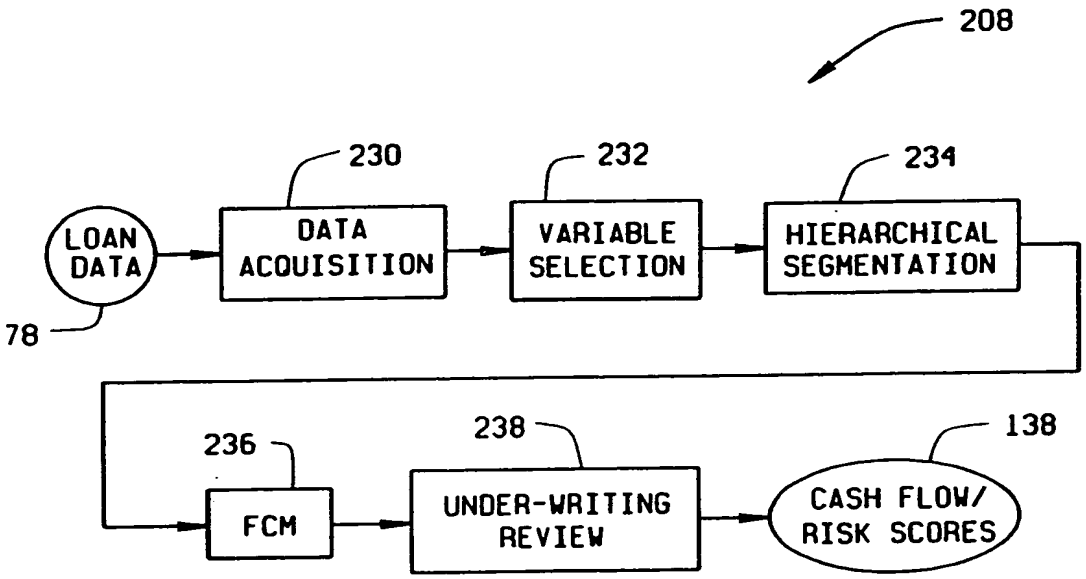
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FIG. 7

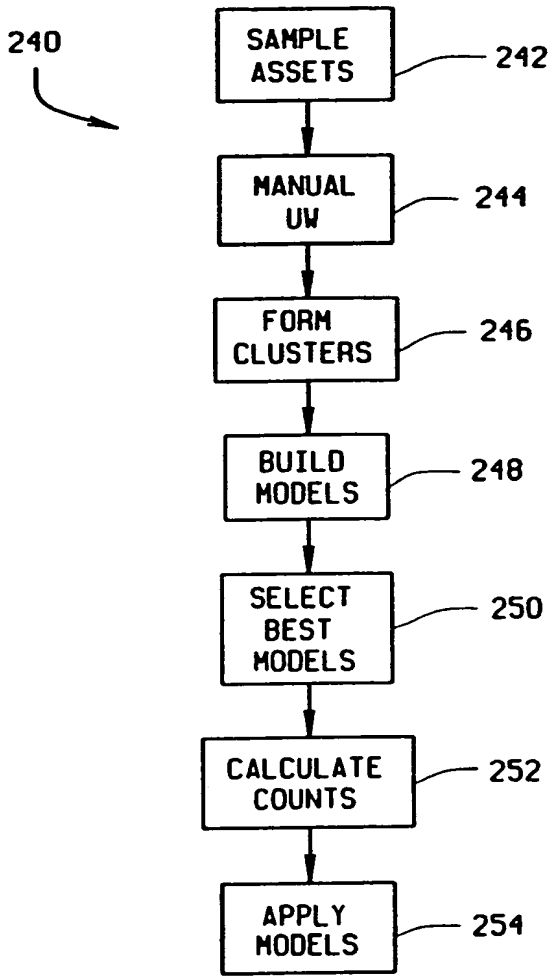
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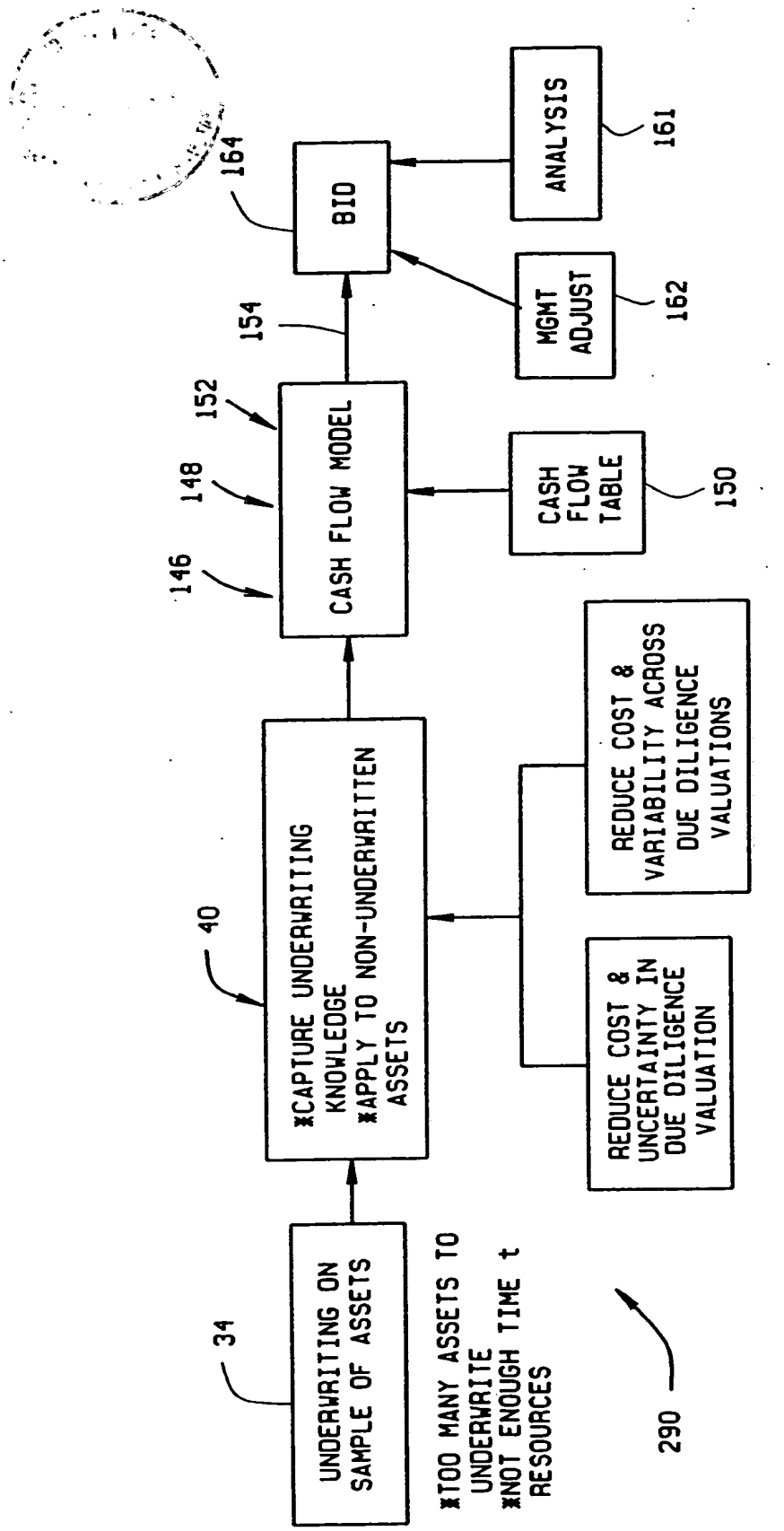
FIG. 8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40
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150
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REDUCE COST & VARIABILITY ACROSS DUE DILIGENCE VALUATIONS
*TOO MANY ASSETS TO UNDERWRITE
*NOT ENOUGH TIME t RESOURCES
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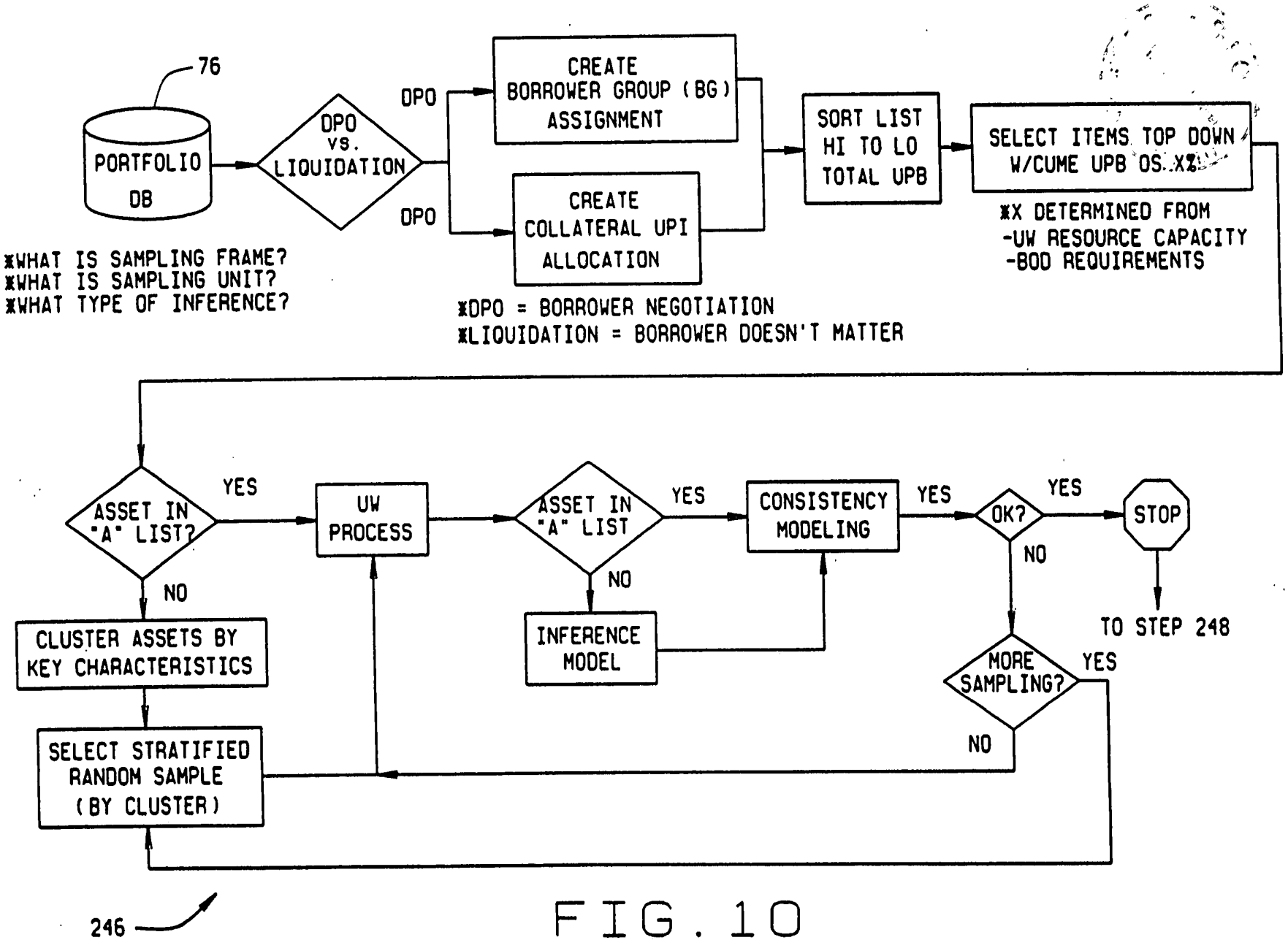
FIG. 9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PORTFOLIO DB
DPO VS. LIQUIDATION
DPO
DPO
CREATE BORROWER GROUP (BG) ASSIGNMENT
CREATE COLLATERAL UPI ALLOCATION
SORT LIST HI TO LO TOTAL UPB
SELECT ITEMS TOP DOWN W/CUME UPB OS X%
*X DETERMINED FROM
-UW RESOURCE CAPACITY
-BOD REQUIREMENTS
*WHAT IS SAMPLING FRAME?
*WHAT IS SAMPLING UNIT?
*WHAT TYPE OF INFERENCE?
*DPO = BORROWER NEGOTIATION
*LIQUIDATION = BORROWER DOESN'T MATTER
ASSET IN "A" LIST?
YES
NO
UW PROCESS
ASSET IN "A" LIST
YES
NO
CONSISTENCY MODELING
YES
OK?
YES
NO
STOP
TO STEP 248
CLUSTER ASSETS BY KEY CHARACTERISTICS
INFERENCE MODEL
MORE SAMPLING?
YES
NO
SELECT STRATIFIED RANDOM SAMPLE (BY CLUSTER)
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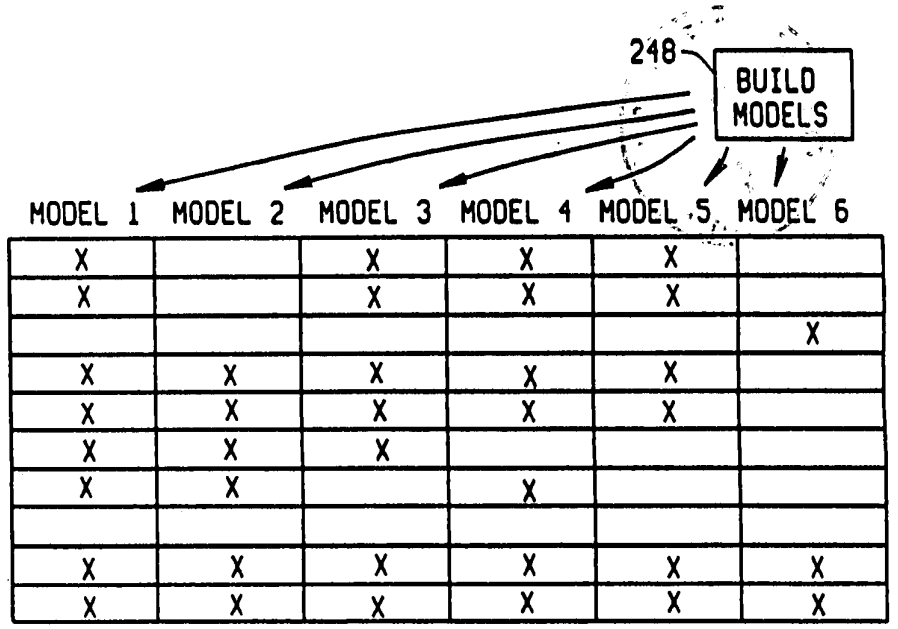
FIG. 10



6 MODELS BUILT:

*MODELS DIFFER BY WHICH VARIABLES USED
*UW ASSETS GET THE MINIMUM ERROR PREDICTION (ACTUAL-PREDICTED)

MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6
X		X	X	X	
X		X	X	X	
					X
X	X	X	X	X	
X	X	X	X	X	
X	X	X			
X	X		X		
X	X	X	X	X	X
X	X	X	X	X	X

MODEL "WEIGHTS":

*EACH CELL IS COUNT OF TIMES THE MODEL PRODUCED BEST PREDICTION FOR UW ASSETS
*DETERMINES WEIGHTS FOR AVERAGING PREDICTIONS FOR NON-UW ASSETS

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MODEL	ASSET CLASS	GROUP	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	SUM
COURT AUCTION	COMMERCIAL	1	13	13	13	8	32	32	87
		2	29	25	29	24	19	19	148
	TOTAL								
COURT AUCTION	RESIDENTIAL	1	5	5	10	4	12	12	51
		2	4	7	9	13	23	23	59
		3	2	15	11	13	8	8	53
	TOTAL								163

252

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MODEL	ASSET CLASS	GROUP	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	SUM
MARKET VALUE	COMMERCIAL	1	16	13	11	15	21	21	86
		2	29	22	29	24	19	19	150
	TOTAL								236
MARKET VALUE	RESIDENTIAL	1	5	8	4	11	12	14	51
		2	8	9	10	15	19	19	59
		3	6	16	5	20	2	2	54
	TOTAL								164

FIG. 11

VARIABLE	CATEGORY/VALUE RANGE	ENCODING SCHEME
LOAN SECURED	(YES, NO)	YES = 1, ELSE = 0
LOAN TYPE	(REVOLVING, NON-REVOLVING)	REVOLVING = 1 ELSE 0
LAST PAYMENT	(0, 250 MM)	0 IF LAST PAYMENT = 0 ELSE 1
NOTICE OF DEFAULT SENT		PRIOR TO JUN 97 EQUALS 1 ELSE 0
ORIGINAL MATURITY DATE		PRIOR TO JUN 97 EQUALS 1 ELSE 0
SYNDICATED LOAN	(YES, NO)	YES = 1, ELSE = 0
LOAN GUARANTEED	(YES, NO, NAV)	YES = 1, ELSE = 0
COLLECTION SCORE	(0, 1)	
LIEN POSITION	(-1, 0, 1)	1 IF LIEN POSITION = 1 ELSE 0
CURRENT UPAID BALANCE/ORIGINAL BALANCE	(0, 2.9)	NORMALIZED TO (0, 1)
LAST PAYMENT TO INTEREST/LAST PAYMENT	(0, 1)	

80

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FIG. 12

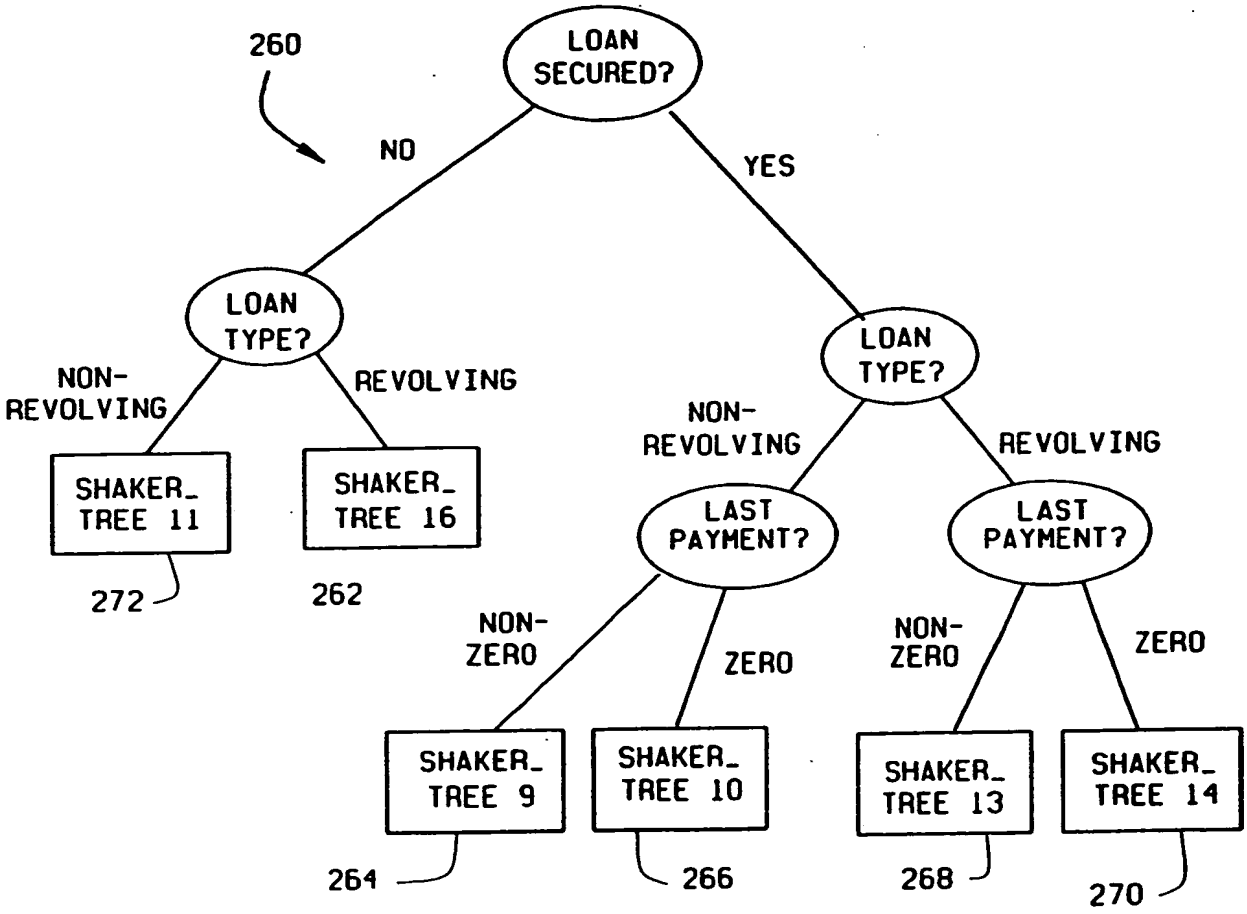
260
LOAN SECURED?
NO
YES
LOAN TYPE?
LOAN TYPE?
NON-REVOLVING
REVOLVING
NON-REVOLVING
REVOLVING
SHAKER_ TREE 11
SHAKER_ TREE 16
LAST PAYMENT?
LAST PAYMENT?
272
262
NON-ZERO
ZERO
NON-ZERO
ZERO
SHAKER_ TREE 9
SHAKER_ TREE 10
SHAKER_ TREE 13
SHAKER_ TREE 14
264
266
268
270

FIG. 13

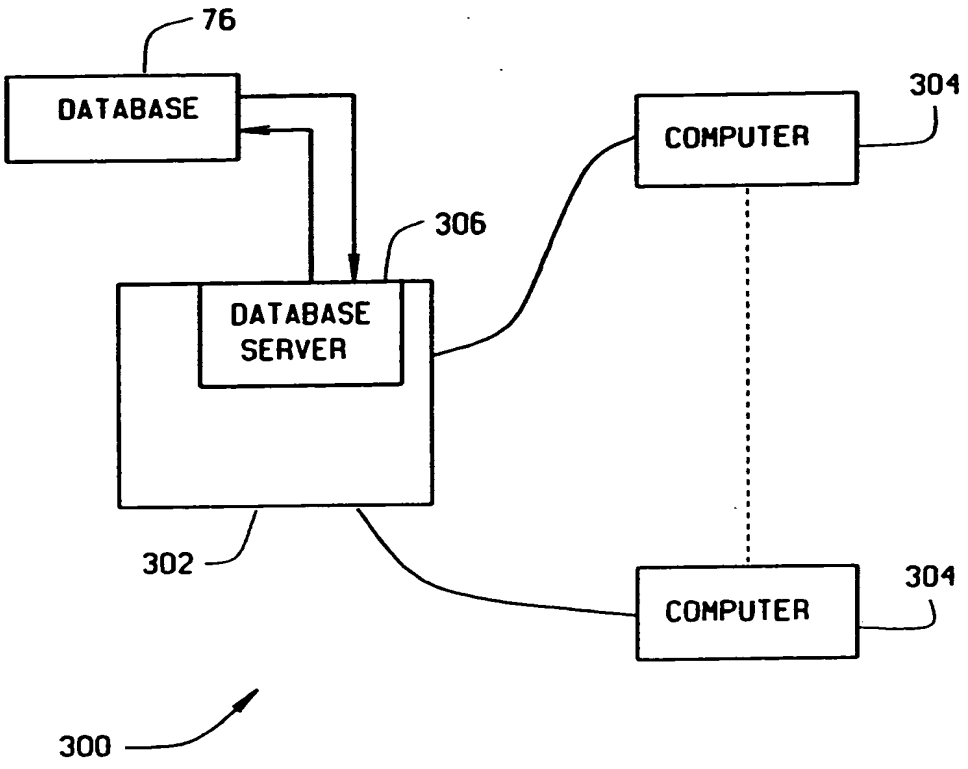
76
DATABASE
304
COMPUTER
306
DATABASE
SERVER
302
304
COMPUTER
300

FIG. 14